Latin America Climate-Smart Villages AR4D sites: 2020 Inventory

RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security

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CIAT
International Center for Tropical Agriculture
Since 1967 Science to cultivate change

Implementing partners

ASORECH
"Trabajando juntos desarrollamos comunidades"

CASM
actalliance

Local partners

Comunidades del TeSAC de Olopa, Guatemala

Comunidades del TeSAC de Santa Rita, Honduras

Funders

IDRC | CRDI
International Development Research Centre
Centre de recherches pour le développement international

Citation

Bonilla-Findji O, Alvarez-Toro P, Martinez-Baron D, Lopez C, Álvarez O, Castellanos A, Martínez JD. 2020. Latin America Climate-Smart Villages AR4D sites: 2020 Inventory. Wageningen, The Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Inventory of CSA practices in Latin America's Climate-Smart Villages

RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security

CGIAR CCAFS

Total practices: 16

Practices with mitigation potential: 4

♀ Gender related effects known: 7

CSA sub-practice	Mitigation potential	Country	CSV sites	Crop	#HHs* implementing	#HHs** Evaluating	Gender impacts assessed
Aquaculture & Irrigation reservoir	No	Guatemala	Olopa	Vegetables	32	Yes, in progress	Yes
Boundary Planting (Living fences or hedgerows)	Yes	Guatemala	Olopa	Coffee	175	Yes, in progress	Yes
Crop rotation (Mixed legume/ non-legume)	No	Guatemala	Olopa	Beans and maize	67	Yes, in progress	Yes
Home Gardens (organic and diversified)	No	Honduras	Santa Rita	Vegetables	126	No	No
Home Gardens (with roof)	No	Guatemala	Olopa	Vegetables	22	Yes, in progress	Yes
Improved pastures (Non N fixing)	Yes	Honduras	Santa Rita	Panicum maximum, Brachiaria brizantha	6	Yes, in progress	Yes
Improved seeds	No	Honduras	Santa Rita	Maize	100	No	No
Improved seeds (biofortified)	No	Honduras	Santa Rita	Beans	79	Yes, in progress	Yes
Multistrata Agroforestry	Yes	Honduras	Santa Rita	Coffee and trees	67	Yes, in progress	Yes
	Yes	Guatemala	Olopa	Coffee and plantains	40	Yes, in progress	Yes

*HHs: households

**Evalauted through the CSA monitoring framework

Inventory of CSA practices in Latin America's Climate-Smart Villages

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CSA sub-practice	Mitigation potential	Country	CSV sites	Crop	#HH s* implementing	#HH** Evaluating	Gender impacts assessed
Organic fertilizer	Yes	Honduras	Santa Rita	Coffe, Sugar cane, beans, Plantains, Cooking Bananas and vegetables	116	Yes, in progress	Yes
	Yes	Guatemala	Olopa	Coffe, Sugar cane, beans, Plantains, Cooking Bananas and vegetables	125	Yes, in progress	Yes
Resilient Home Gardens (+water harvesting from roof)	No	Honduras	Santa Rita	Vegetables	3	No	No
Resilient Home Gardens (+water harvesting)	No	Guatemala	Olopa	Vegetables	155	Yes, in progress	Yes
Terraces with boundary planting (living fences or hedgerows)	Yes	Honduras	Santa Rita	Coffee and trees	50	Yes, in progress	Yes
Water Harvesting (cisterns and tanks)	No	Honduras	Santa Rita	Vegetables	48	Yes, in progress	Yes
Water Harvesting (contour ridges)	No	Guatemala	Olopa	Coffe, Plantains and Cooking Bananas	175	Yes, in progress	Yes
Water harvesting (reservoirs)	No	Guatemala	Olopa	Vegetables	125	Yes, in progress	Yes
	No	Honduras	Santa Rita	Vegetables	47	Yes, in progress	Yes

*HHs: households

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Financial services	Country	CSV sites	Available in the site (but not related to CCAFS)	Implemented by CCAFS	# of households	# of male	# of female
Agricultural credit	Honduras	Santa Rita	Yes	No	252	120	128
	Guatemala	Olopa	Yes	No	-	-	-

Climate Information Services	Country	CSV sites	Associated Crops	Available in the CSV but not related to CCAFS work	Are they implemented by CCAFS?	# of Households involved	Number of Male involved	Number of Female involved
Forecast + Agroadvisories on varieties	Honduras	Santa Rita	Maize Beans	No	Yes	175	75	125
	Guatemala	Olopa	Maize Beans	No	Yes	126	74	52
Seasonal Forecast	Honduras	Santa Rita	Coffee Plantain	No	Yes	175	75	125
	Guatemala	Olopa	Coffee Plantain	No	Yes	126	74	52

Contacts

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CSV Coordinator **Jesús Martínez Salgado**
(j.d.martinez@cgiar.org)

Acknowledgments

This CSV inventory was implemented as part of CCAFS Flagship 2 activities under the global and regional coordination of Osana Bonilla-Findji and Deissy Martinez-Baron respectively. We would like to acknowledge the valuable support of ASORECH, CASM, and our supporting partners.

Climate-Smart Village Santa Rita (Honduras)

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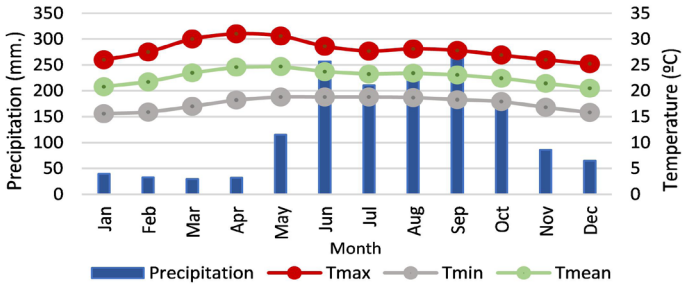
660 m.a.s.l | 1-5 Ha Farm size | 479 HH | 10% Headed HH

Main crops and livestock

Specific

Food: maize, beans, small animals **Food/cash:** turkeys, pigs **Cash:** coffee, cocoa

Climatic conditions



Source: www.worldclim.org

Parameter	Amount	Narrative
Total annual P	1.533 mm	A single rainy season of 1.247 mm (May – Oct) and a dry season of 286 mm (Jan-Apr, Nov-Dec)
Max # of consecutive dry months	6 months (< 100 mm)	
Max T rainy season	30.6ºC	
Max T dry season	31.0ºC	
Highest Tmin	18.8ºC	May, June, July

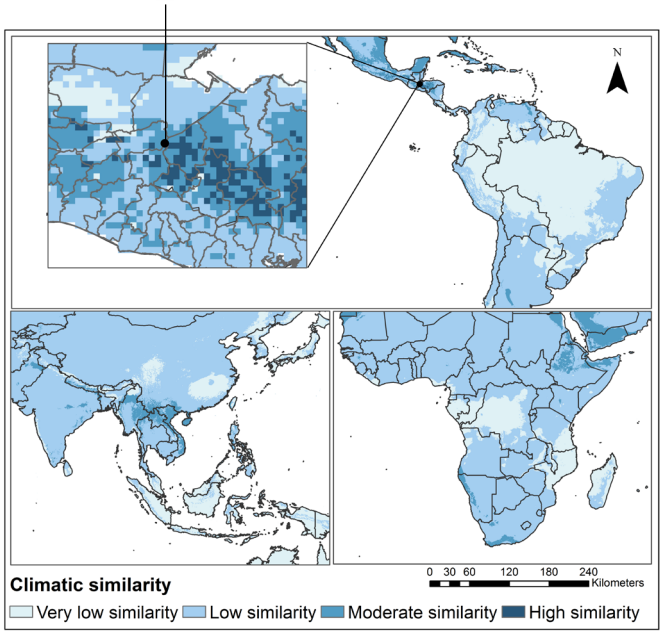
**CCAFS Household baselines (2014)*

Climate-related risks

Higher temperatures, unstable and erratic rainy season, more frequent droughts.

Areas of climatic similarity

Santa Rita-CSV
14.99"N -82.9"W



Areas whose future projected climate (by 2030) is similar to the current climate in this CSV

Source: www.ccafs-analogues.org

Climate-Smart Village Santa Rita (Honduras)

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CCAFS

660 m.a.s.l

1-5 Ha Farm size

479 HH

10% Headed HH

2020: Field testing of CSA portfolio and # of households involved

i Implemented | Evaluated | Implemented & Evaluated* | U Mitigation potential | Households

▲ Available in Site, not by CCAFS | ♀ Potential gender impact know | ♀ Gender aspect assessed

CSA Practices

Home garden (organic and diversified)	126	Organic Fertilizer (biopreparations)	116
i Improved Pasture (Non N fixing)	6	Resilient Home gardens (+water harvesting from roof)	3
i Improved seeds (maize)	100	Terraces with boudary Planting (Living Fences or Hedgerows)	50
Improved seeds (biofortified beans)	79	Water harvesting (Cisterns and tanks)	48
Multistrata Agroforestry (coffee)	67	Water harvesting (Reservoirs)	47

*Evalauted through the CSA monitoring framework

CSV profile developed by Osana Bonilla-Findji, Patricia Alvarez-Toro and Julian Ramirez-Villegas

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2020: Field testing of CSA portfolio and # of households involved

Implemented | Evaluated | Implemented & Evaluated | Households

Available in Site, not by CCAFS

Agro-climatic services

- Forecast + Agroadvisories on varieties — 126 households
- Seasonal forecast — 126 households

Financial services

- Agricultural credit

Flagship projects

Generating evidence on gender-sensitive climate-smart agriculture to inform policy in Nicaragua and Guatemala
Agroclimatic digitally integrated solutions
Developing Climate-Smart Villages in Latin America

Partners

Alliance

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Visit the CSV Santa Rita site: https://ccafs.cgiar.org/research/projects/santa-rita-climate-smart-village-honduras

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Climate-Smart Village Olopa (Guatemala)

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1585 m.a.s.l

<1 Ha Farm size

Maya Ch'orti 555 HH

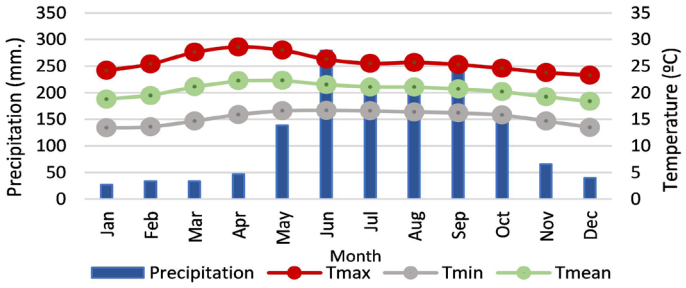
26% Headed HH

Main crops and livestock

Specific

Food: maize, beans, small animals **Food/cash:** banana, pigs **Cash:** coffee, cocoa

Climatic conditions



Source: www.worldclim.org

Parameter	Amount	Narrative
Total annual P	1.484 mm	A single rainy season of 1.236 mm (May – Oct) and a dry season of 248 mm (Jan-Apr, Nov-Dec)
Max # of consecutive dry months	6 months (< 100 mm)	
Max T rainy season	28ºC	
Max T dry season	28.6ºC	
Highest Tmin	16.7ºC	June

*CCAFS Household) baselines (2014)

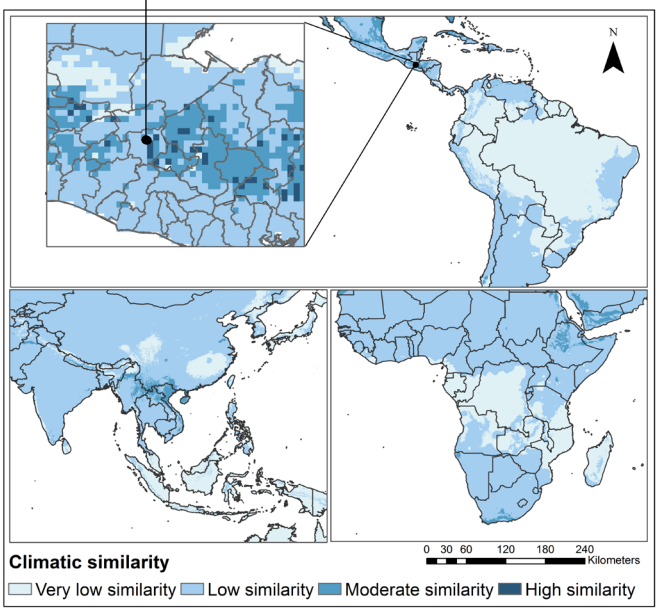
Ethnic group

Climate-related risks

Unpredictable start of rainy season. Drier summer season

Areas of climatic similarity

Olopa-CSV
14.75"N 89.4"W



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Implemented | Evaluated | Implemented & Evaluated* | Mitigation potential | Households

Available in Site, not by CCAFS | Potential gender impact know | Gender aspect assessed

CSA Practices

Aquaculture & Irrigation reservoir	32	Multistrata Agroforestry (coffee)	40
Boundary Planting (Living Fences or Hedgerows)	175	Organic fertilizer (biopreparations)	125
Crop rotation (Mixed legume/non-legume)	67	Resilient Home gardens (+water harvesting)	155
Home Gardens (with roof)	22	Water Harvesting (contour ridges)	175
		Water Harvesting (reservoirs)	125

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Agro-climatic services	Financial services
Forecast + Agroadvisories on varieties 175	Agricultura credit
Seasonal forecast 175	

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